



BSI Standards Publication

Cigarettes — Determination of selected phenolic compounds in cigarette mainstream smoke with an intense smoking regime using HPLC-FLD

National foreword

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**Cigarettes — Determination of selected
phenolic compounds in cigarette
mainstream smoke with an intense
smoking regime using HPLC-FLD**

*Cigarettes — Dosage de composés phénoliques sélectionnés dans le
courant principal de la fumée de cigarette avec un régime de fumage
intense par CLHP-FLD*





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ISO copyright office
CP 401 • Ch. de Blandonnet 8
CH-1214 Vernier, Geneva
Phone: +41 22 749 01 11
Email: copyright@iso.org
Website: www.iso.org

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Foreword

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This document was prepared by Technical Committee ISO/TC 126, *Tobacco and tobacco products*.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at www.iso.org/members.html.

Introduction

The CORESTA¹⁾ Smoke Analytes Sub-Group²⁾ selected one method using reversed phase high performance liquid chromatography with fluorescence detection (HPLC-FLD) for the determination of selected phenolic compounds in cigarette mainstream smoke. Smoke was collected on a glass fibre filter pad and extracted with a 1 % acetic acid solution.

A CORESTA recommended method (CRM) was written^[1] on the basis of the results obtained in a interlaboratory study conducted in 2013 involving 18 laboratories using cigarettes manufactured from a range of blend styles. Cigarettes were smoked with the intense smoking regime specified in Health Canada Official Method T-115 (equivalent to ISO 20778).

This document is based upon the CRM 78 and includes statistical evaluations carried out according to ISO 5725-1^[2] and ISO 5725-2^[3].

No machine smoking regime can represent all human smoking behaviour.

- It is recommended that cigarettes also be tested under conditions of a different intensity of machine smoking than those specified in this document.
- Machine smoking testing is useful to characterize cigarette emissions for design and regulatory purposes, but communication of machine measurements to smokers can result in misunderstandings about exposure and risk across brands.
- Smoke emission data from machine measurements may be used as inputs for product hazard assessment, but they are not intended to be nor are they valid as measures of human exposure or risks. Communicating differences between products in machine measurements as differences in exposure or risk is a misuse of testing using ISO standards.

1) Available at: www.coresta.org.

2) Until 2017, this was referred to as CORESTA Special Analytes Sub-group.